



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,530	08/01/2001	Frederic Louart	BIF103835	4810

466 7590 01/27/2004

YOUNG & THOMPSON  
745 SOUTH 23RD STREET 2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER
----------

RHEE, JANE J

ART UNIT	PAPER NUMBER
----------	--------------

1772

18

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

EJC

**Office Action Summary**

Application No.

09/890,530

Applicant(s)

LOUART ET AL.

Examiner

Jane J Rhee

Art Unit

1772

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 47-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Rejections Withdrawn***

1. The 35 U.S.C. 102 rejection of claims 47 and 49 anticipated by Weil made of record in paragraph 2 of Paper 15 has been withdrawn due to applicant's amendment in Paper 16.
2. The 35 U.S.C. 103 rejection of claim 48 over Weil in view of Rockney et al. made of record in paragraph 3 of Paper 15 has been withdrawn due to applicant's amendment in Paper 16.

### ***New Rejections***

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 47-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new matter is "an original relaxed configuration".

#### ***Claim Rejections - 35 USC § 103***

Art Unit: 1772

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable by Weil. (5617900).

Weil discloses a thermal protection sheath comprising an inner tubular substrate that has an exterior surface with a plurality of recesses therein (figure 2 number 20), the substrate being longitudinally and radially elastically deformable (col. 2 lines 63-65) and a reflective foil fixed to the substrate (figure 2 numbers 20 and 30), wherein the foil contacts an outside surface of the substrate only intermittently so as to form air pockets (abstract lines 14-18, figure 3), the reflective foil being arranged on the substrate to have a plurality of indentations that correspond to the plurality of recesses when the substrate is in the relaxed configuration and that disappear when the substrate is elastically deformed to permit the substrate to assume the expanded configuration (col. 2 lines 63-65). Weil discloses that the substrate comprises a woven material (col. 2 line 56) and the recesses are between threads of the woven material (figure 2 number 20).

As for the substrate being longitudinally and radially elastically deformable between an original relaxed configuration and an expanded configuration in which a length and a radius of the substrate are larger than its relaxed configuration, Weil teaches that the substrate can be compressed and released after compression wherein the tubular member will "spring" back to a generally original configuration (col. 2 lines

Art Unit: 1772

65), thus, providing flexible resilience to the inner tubular member therefore, because of substrate's resilient properties the tubular member would be able to expand and also "spring" back to its original configuration.

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide the substrate being longitudinally and radially elastically deformable between an original relaxed configuration and an expanded configuration in which a length and a radius of the substrate are larger than its relaxed configuration since the substrate obtains flexible resilient properties.

5. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weil in view of Rockney et al. (5660899).

Weil discloses the thermal protection sheath described above. Weil fail to disclose that the substrate comprises a corrugated tube and the recesses are annular depressions in the exterior surface, and wherein the air pockets are in the annular depressions between the foil and the corrugated tube. Rockney teaches corrugated tube with recesses that are annular depression in the exterior surface for the purpose of providing superior flexibility in order to unobtrusively follow bends and curves in the line or other component protected by the tubing (col. 1 lines 40-43, 65-66).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Weil with a corrugated tube that comprises recesses that are annular depression in the exterior surface for the purpose of providing superior flexibility in order to unobtrusively follow bends and curves in the

Art Unit: 1772

line or other component protected by the tubing (col. 1 lines 40-43, 65-66) as taught by Rockney.

As to the air pockets that are in the annular depressions between the foil and the corrugated tube, Weil discloses air pockets between the foil layer and the substrate layer for the purpose of providing reflective thermal protection (col. 3 lines 32-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to form air pockets in the annular depression between the foil and the corrugated tube in order to provide reflective thermal protection as taught by Weil (col. 3 lines 32-35).

***Response to Arguments***

6. Applicant's arguments filed 11/12/03 have been fully considered but they are not persuasive.

In response to applicant's argument that Weil discloses a sheath that can be contracted from the original relaxed configuration but not a sheath that can be expanded from the original relaxed configuration, Weil discloses that the sheath comprises flexible and resilient materials therefore, the sheath can be expanded from the original relaxed configuration.

In response to applicant's argument that the indentations in the foil disappear when the sheath is in the original relaxed configuration and thus the sheath cannot expand further, once the foil comprises indentations the foil by nature would not be able to revert back to a smooth, indentation absent substrate therefore since indentations do not disappear when the foil is in the expanded state, the sheath can expand further.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Ahmad can be reached on 571-272-1487. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Application/Control Number: 09/890,530

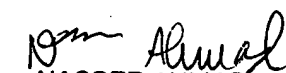
Page 7

Art Unit: 1772



Jane Rhee

January 21, 2004



NASSER AHMAD  
PRIMARY EXAMINER